



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/606,928	06/27/2003	Makoto Ochi	030777	3870

23850 7590 05/25/2006

ARMSTRONG, KRATZ, QUINTOS, HANSON & BROOKS, LLP
1725 K STREET, NW
SUITE 1000
WASHINGTON, DC 20006

EXAMINER

RHEE, JANE J

ART UNIT	PAPER NUMBER
----------	--------------

1745

DATE MAILED: 05/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/606,928

Applicant(s)

OCHI ET AL.

Examiner

Jane Rhee

Art Unit

1745

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>12/8/05, 6/27/03</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Rejection Withdrawn

1. The 35 U.S.C. 102(e) rejection of claims 1-4 anticipated by Maeda et al. has been withdrawn due to applicant's arguments filed on 3/14/2006.
2. The 35 U.S.C. 103(a) rejection of claims 5-13 unpatentable over Bando et al. in view of Maeda et al. has been withdrawn due to applicant's arguments filed on 3/14/2006.

New Rejection

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bando et al. in view of Maeda et al. (6338917).

As to claim 1, Bando et al. discloses an alkaline storage battery incorporating an electrode group comprising nickel cathodes and anodes (col. 2 lines 45-54), disposed in such a way as to oppose each other with a separator interposed therebetween (col. 7 line 57), wherein the nickel cathodes each include a cathode active material composed mainly of nickel hydroxide, having a coating layer of a cobalt compound (col. 2 lines 50-55) and wherein the alkaline electrolytic solution contains lithium hydroxide of 0.5 to 1.5M (col. 21 line 1).

As to the species of a compound selected from the group consisting of niobium compound, titanium compound, tungsten compound and molybdenum compounds to be added to the coating layer of cobalt compound, Maeda et al. teaches the addition of titanium or niobium to the cobalt compound for the purpose of increasing the oxygen overvoltage that is contained inside the electrically conductive material (col. 3 lines 17-19).

Therefore, it would have been obvious to one having ordinary skill in the art at the time applicant's invention was made to provide Bando et al. with the addition of titanium or niobium to the cobalt compound in order to increase the oxygen overvoltage that is contained inside the electrically conductive material (col. 3 lines 17-19) which would consequently improve battery performances.

As to claim 2, Bando et al. discloses that the cobalt compound coating the nickel is a cobalt compound containing alkaline cations (col. 7 lines 1-3).

As to claim 3, Maeda et al. discloses wherein the amount of niobium compound or titanium compound to be added is 0.1-3% by mass in relation to the mass of cathode active material composed mainly of nickel hydroxide, having the coating layer of the cobalt compound (col. 3 lines 27) for the purpose of increasing the oxygen overvoltage that is contained inside the electrically conductive material (col. 3 lines 17-19).

Therefore, it would have been obvious to one having ordinary skill in the art at the time applicant's invention was made to provide Bando et al. with the addition of titanium or niobium to the cobalt compound in the amount of 0.1-3% by mass in relation to the mass of cathode active material composed mainly of nickel hydroxide, having the

coating layer of the cobalt compound in order to increase the oxygen overvoltage that is contained inside the electrically conductive material (col. 3 lines 17-19) which would consequently improve battery performances.

As to claim 4, Bando et al. discloses that the alkaline electrolytic solution contains sodium hydroxide (col. 20 line 62).

Response to Arguments

4. Applicant's arguments with respect to claims 1-4 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jane Rhee whose telephone number is 571-272-1499. The examiner can normally be reached on M-F 9-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1745

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jane Rhee
May 16, 2006



PATRICK JOSEPH RYAN
SUPERVISORY PATENT EXAMINER